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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,705	06/10/2005	Toyohumi Asano	441P092	2686
42754	7590	05/07/2008	EXAMINER	
Nields & Lemack 176 E. Main Street Suite #5 Westboro, MA 01581			BERNSHTEYN, MICHAEL	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			05/07/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/532,705

**Applicant(s)**

ASANO ET AL.

**Examiner**

MICHAEL M. BERNSTEYN

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Office Action follows a response filed on February 8, 2008. Claims 7-12 have been amended; no claims have been cancelled or added.
2. Claims 1-12 are pending.

***Claim Rejections - 35 USC § 103***

3. The text of this section of Title 35 U.S.C. not included in this action can be found in a prior Office Action.
4. Claims 1-6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubota et al. (U. S. Patent 5,596,023) in view of Machida et al. (JP 06-073164) and further in view of Yamada et al. (JP 09-005759), for rationale recited in paragraph 4 of Office action dated on October 26, 2007.
5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubota et al. (U. S. Patent 5,596,023) in view of Machida et al. (JP 06-073164) and Yamada (JP 09-005759) as applied to claims 1-6 and 9-12 above and further in view of Yamamura et al. (U. S. Patent 6,287,745) and Komano et al. (U. S. Patent 6,010,824), for rationale recited in paragraph 5 of Office action dated on October 26, 2007.

***Response to Arguments***

6. Applicant's arguments filed on February 8, 2008 have been fully considered but they are not persuasive.

7. It appears that the focal Applicants argument resides in the contention that the text of the specification shows the comparative experiments using the thermosetting agents other than the claimed curing agent, wherein Comparative Example 2 using adipic acid dihydrazide, which is used in the working examples in Tsubota and Machida, demonstrates that the adipic acid dihydrazide of the curing agent was eluted in the crystal upon thermal curing, with the result that when cooled, white deposition was formed, which fails to provide a desirable sealing material (refer to page 39, lines 12-18 and Table 1 of the English text of the specification). On the other hand, the claimed invention selects isophthalic acid dihydrazide as the curing agent to provide a long pot life, high adhesion strength, a liquid crystal contamination-preventive property and a gap-forming function, which are unpredictable even from the combination of Tsubota, Machida and Yamada et al. (page 5, 1<sup>st</sup> and 2<sup>nd</sup> paragraphs).

8. It is well settled that "an applied reference may be relied upon for all that it would have reasonably suggested to one of ordinary skill in the art, including not only preferred embodiment, but less preferred and even non preferred". *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989).

As it was already mentioned in previous Office action dated on October 26, 2007, Machida clearly discloses that as an organic acid hydrazide compound used as a curing agent of an epoxy resin, monobasic acid hydrazide compounds, such as salicylic acid hydrazide, phenylamino propionic acid hydrazide, succinic acid dihydrazide, adipic acid dihydrazide, **isophthalic acid dihydrazide**, etc. can be used (page 2, [0005]).

Therefore, all of the above organic acid hydrazides are functional equivalents and can be substituted by each other. Thus, Machida recognizes the equivalency of succinic acid dihydrazide or adipic acid dihydrazide used by Tsubota and isophthalic acid dihydrazide as thermosetting or curing agent for the resin composition for sealing liquid crystals. In the instant case the substitution of equivalents thermosetting or curing agents requires no express motivation, as long as the prior art recognize equivalency, *In re Fount*, 213 USPQ 532 (CCPA 1982); *In re Siebentritt*, 152 USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. V. Linde Air Products Co.* 85 USPQ 328 (USSC 1950), and a person skilled in the art would have found obvious to substitute succinic acid dihydrazide or adipic acid dihydrazide of Tsubota for **isophthalic acid dihydrazide** of Machida based on their recognized equivalency and with the reasonable expectation of success.

9. Regarding Applicants arguments about comparative example 2 (page 39, lines 12-18 and Table 1 of the English text of the specification), it is noted that the example 3 and comparative example 2 are not commensurate with the scope of the claims because they both do not contain component (b) as per instant claim 1. Furthermore, it is not clear the difference in the amounts of isophthalic acid dihydrazide (example 3; 9.3 parts, page 32) and adipic acid dihydrazide (comparative example 2; 8.1 parts, page 34). The results of table 1 show "good while sludge" for the comparative example 2, which is unclear while all prior arts recited in the previous Office action dated on October 26, 2007 disclose adipic acid dihydrazide among preferable heat-curable or thermosetting agents for sealing materials for liquid crystal and liquid crystal display cell.

10. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a long pot life, high adhesion strength, a liquid crystal contamination-preventive property and a gap-forming function) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL M. BERNSHTEYN whose telephone number is (571)272-2411. The examiner can normally be reached on M-Th 8-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael M. Bernshteyn/  
Examiner, Art Unit 1796

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Examiner, Art Unit 1796

/Randy Gulakowski/  
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